



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,871	02/03/2004	Paul Roberts	60.130-1993; 04MRA0055	1045
26096	7590	06/20/2006		
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			EXAMINER STORMER, RUSSELL D	
			ART UNIT 3617	PAPER NUMBER

DATE MAILED: 06/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/770,871	Applicant(s) ROBERTS ET AL.	
	Examiner Russell D. Stormer	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 10-22 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 and 22 is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-12, 16, 17, 19-21 and 25 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

1. The indicated allowability of claims 11 and 25 is withdrawn in view of the newly discovered references to Apple. Rejections based on the newly cited references follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 2, 3, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Varela (previously cited).

The limitation from claim 24 of the teeth being formed on a ring that surrounds the non-rotating component which has been added to claim 1 is noted. However, the claim is written in Markush form and the Varela patent still meets the claim as it teaches the radial protrusions, which is claimed as the alternative to the teeth.

Varela discloses a non-rotating tubular axle usable in a trailer comprising a brake flange or torque plate 24 which is fixed to the axle. As shown in figure 5A, a plurality of teeth or interlocking discrete radial protrusions 36, 38 are provided to prevent relative rotation between the plate 24 and the axle 28. Further, axial location members or end stops (unlabelled) are formed by the tube 28 on either side of the plate as shown in

figure 3. Although a brake is not shown, being a brake flange, the plate 24 would inherently have a brake mounted thereto.

4. Claims 1, 2, 10, 11, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Apple (U.S. Patent Number 1,968,590; newly cited).

The radial location member 24 has protrusions or teeth to engage the non-rotation member 2, and the torque plate 52 is mounted to the non-rotation member through the location member 24. The sleeve member 26 forms the axial location member.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Varela in view of Creek et al (previously cited).

Varela does not disclose the use of welds in the assembly.

Creek et al teaches a tubular axle which receives a flange 14, A plurality of teeth interlock the axle and flange. Welds 42, 46 may be provided to finish the assembly. These welds are clearly non-torque bearing welds because the torque is borne by the teeth interlocking the axle and the flange. From this teaching it would have been obvious to provide the assembly of Varela with a non-torque bearing weld between the

Art Unit: 3617

plate and the axle as this would, for instance, seal the connection between the plate and the weld.

7. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apple '590.

8. Claims 16, 17, 19, 20, 21, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Apple '590 in view of Spindler (newly cited).

The method of mounting the torque plate to the axle of Apple '590 would have been obvious due to the construction of the parts.

The use of the non-rotating component as a trailer axle beam for a trailer axle is obvious as it is considered to be an intended use of the axle and not patentably distinct.

To substitute a disc brake for the drum brake would have been obvious as a substitution of one type of known brake for another and would not affect the rest of the assembly.

The spindle 2 of Apple '590 is not tubular.

Spindler teaches an axle assembly in which the spindle 14 may be solid or tubular. From this teaching it would have been obvious to form the spindle of Apple '590 to be hollow or tubular in order to reduce the weight of the wheel end assembly.

Allowable Subject Matter

9. Claims 13-15, and 22 are allowable over the prior art of record.

Art Unit: 3617

10. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

11. Applicant's arguments filed May 10, 2006 have been fully considered but they are not persuasive.

As noted above, even though subject matter that was previously indicated allowable has been inserted in claim 1, the alternative language still permits the use of Varela to reject that claim.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references show other wheel end assemblies and tubular axles.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell D. Stormer whose telephone number is (571) 272-6687. The examiner can normally be reached on Monday through Friday, 9 AM to 4 PM.

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joe Morano can be reached on (571) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

6/15/06


RUSSELL D. STORMER
PRIMARY EXAMINER 6/15/06